



US Army Corps
of Engineers
Seattle District



Joint Public Notice

Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

US Army Corps of Engineers
Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-3755
Telephone (206) 764-5527
Attn: Susan Powell, Project Manager

WA Department of Ecology
SEA Program
Post Office Box 47600
Olympia, WA 98504-7600
Telephone (360) 407-6068
Attn: SEA Program, Federal Permit
Coordinator

Public Notice Date: May 23, 2007

Expiration Date: June 21, 2007

Reference No.: NWS-2007-504-NO

Name: Kircher, John and Kimberley

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the United States as described below and shown on the enclosed drawings.

The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Ecology will review the work pursuant to Section 401 of the CWA, with applicable provisions of State water pollution control laws and the Coastal Zone Management Act.

APPLICANT: John and Kimberley Kircher
122 Overlake Drive East
Medina, Washington 98039
Telephone: (206) 660-3548

AGENT: Waterfront Construction, Inc.
Mr. Alan Foltz
205 Northeast Northlake Way, Suite 230
Seattle, Washington 98105
Telephone: (206) 548-9800

LOCATION: In Lake Washington at Medina, Washington.

WORK: Expand an existing pier, install a watercraft lift, remove approximately 40 linear feet of bulkhead, and create a beach cove consisting of logs, boulders, gravel/cobble, and native vegetation.

PURPOSE: Provide private watercraft and float plane moorage, recreational access to the lake, and shoreline enhancement.

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of

ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat.

After receipt of comments from this public notice, the Corps will evaluate the potential impacts to proposed and/or listed species and their designated critical habitat.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat. The proposed action would impact EFH in the project area.

If the Corps determines that the proposed action may adversely affect EFH for federally managed fisheries in Washington waters, the Corps will initiate EFH consultation with the NMFS. The Corps' final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

CULTURAL RESOURCES: The District Engineer has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible and other sources of information. There are no recorded historic properties within the permit area. The permit area has been so extensively modified by modern development that little likelihood exists for the proposed project to impinge upon an undisturbed historic property. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area. This public notice initiates consultation under Section 106 of the National Historic Preservation Act with any Tribe that has information or concerns with historic properties in the proposed permit area.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

EVALUATION – CORPS - The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the United States.

EVALUATION—ECOLOGY: Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

ADDITIONAL EVALUATION:

This proposal is the subject of a Shorelines Substantial Development Permit, being processed by the city of Medina.

COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commentor's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

Corps comments: All e-mail comments should be sent to susan.m.powell@usace.army.mil. Conventional mail comments should be sent to U.S. Army Corps of Engineers, Regulatory Branch, Ms. Susan Powell, Post Office Box 3755, Seattle, Washington, 98124-3755.

Ecology Comments: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA, may do so by submitting written comments to the following address: Department of Ecology, Attn: SEA program – Federal Permit Coordinator, P.O. Box 47600, Olympia, Washington, 98504-7600, or e-mail to ecyrefedpermit@ecy.wa.gov

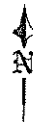
To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Kircher, John and Kimberley, NWS-2007-504-NO

Encl: Figures (14)

205 NE NORTHLAKE WAY, Suite 230
SEATTLE, WA. 98105 (206) 548-9800



DATE: 08-18-06



①
COLLETT, ROBERT
130 OVERLAKE DR E
MEDINA, WA. 98039
938970 0005

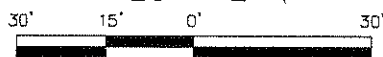
JOB SITE

JOHN & KIM KIRCHER
122 OVERLAKE DR E
MEDINA, WA. 98039
938970 0010

S 74°-44' E
315.25'

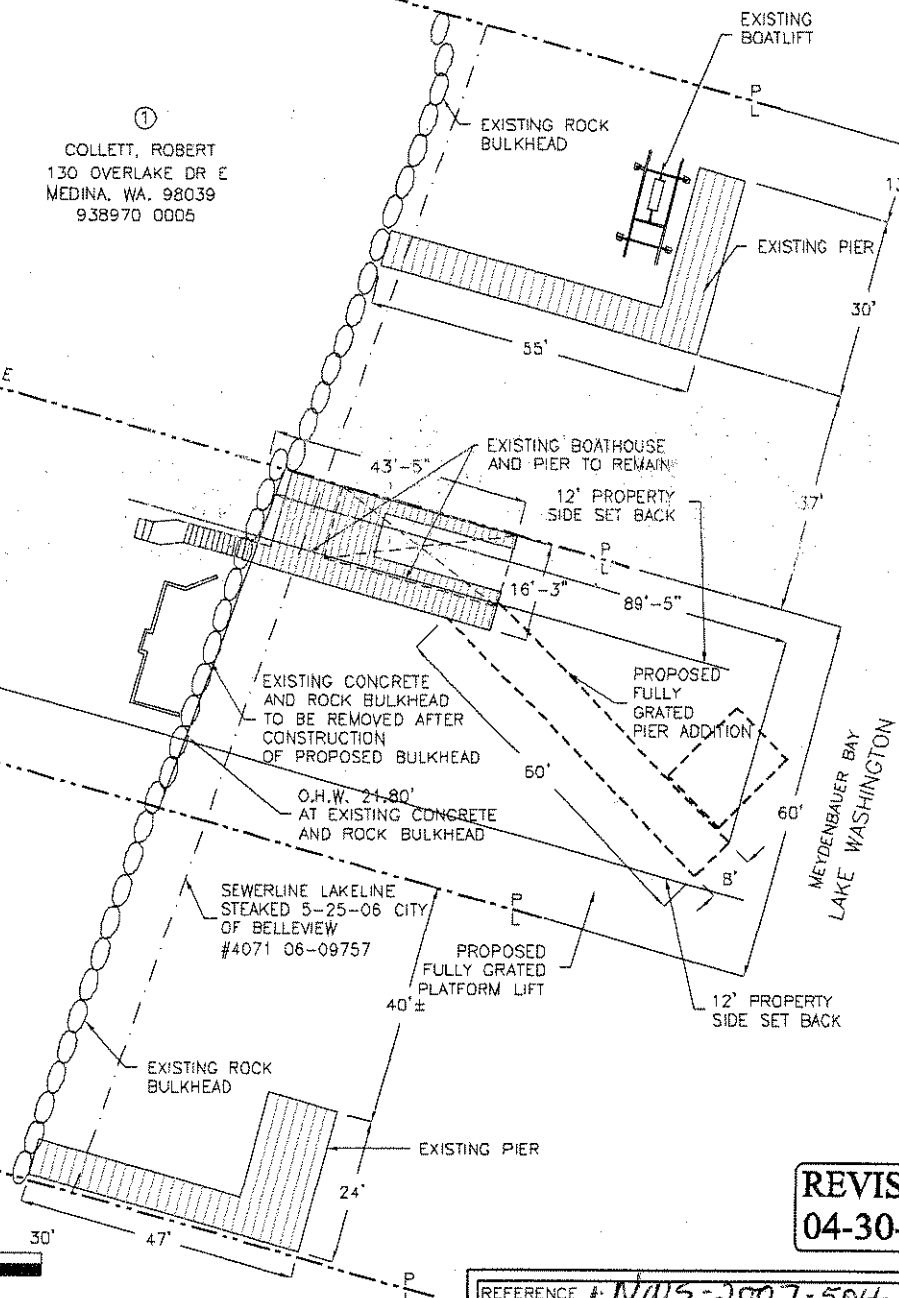
②
SOKASKI, MICHAEL
116 OVERLAKE DR E
MEDINA, WA. 98039
938970 0015

PLOT PLAN



SCALE: 1"=30'

NOTE: PLANTING PLAN DETAILS START ON SHEET 6.



REVISED
04-30-07

REFERENCE: *NWS-2007-504-NB*

APPLICANT: JOHN & KIM KIRCHER

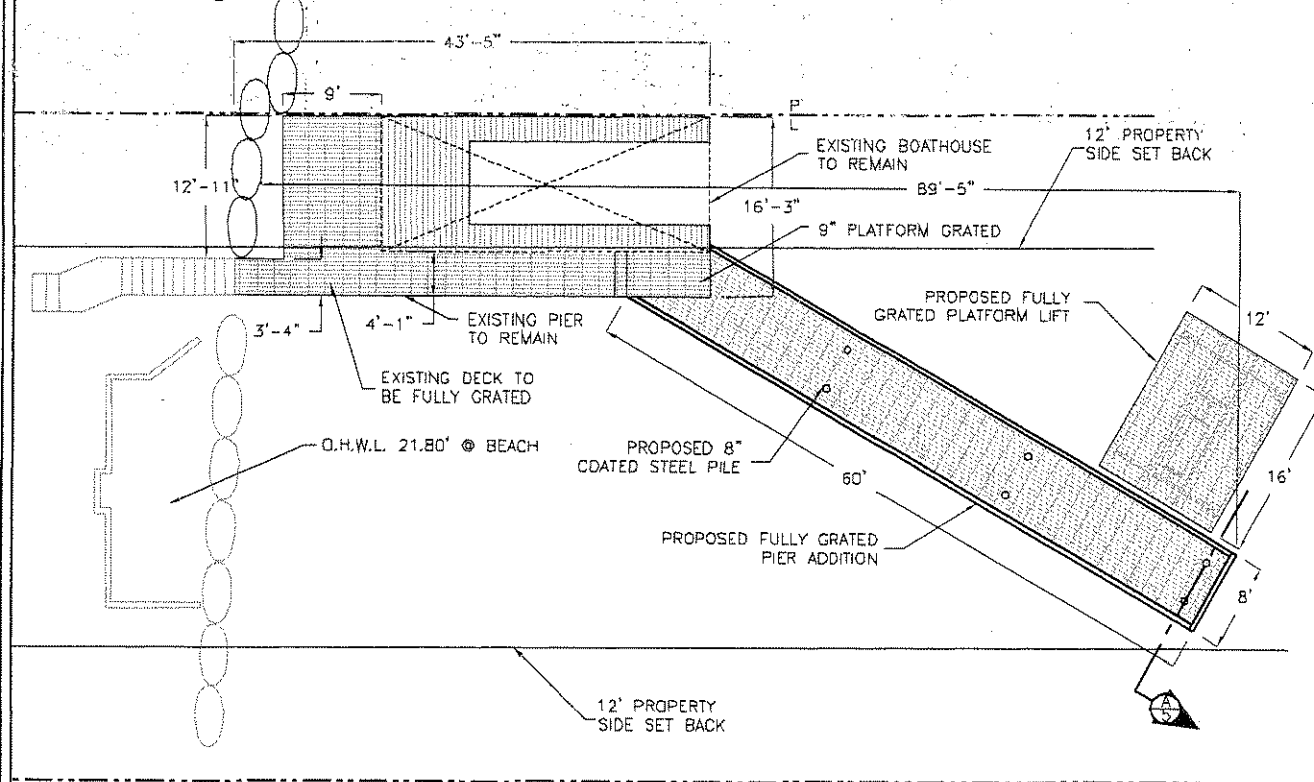
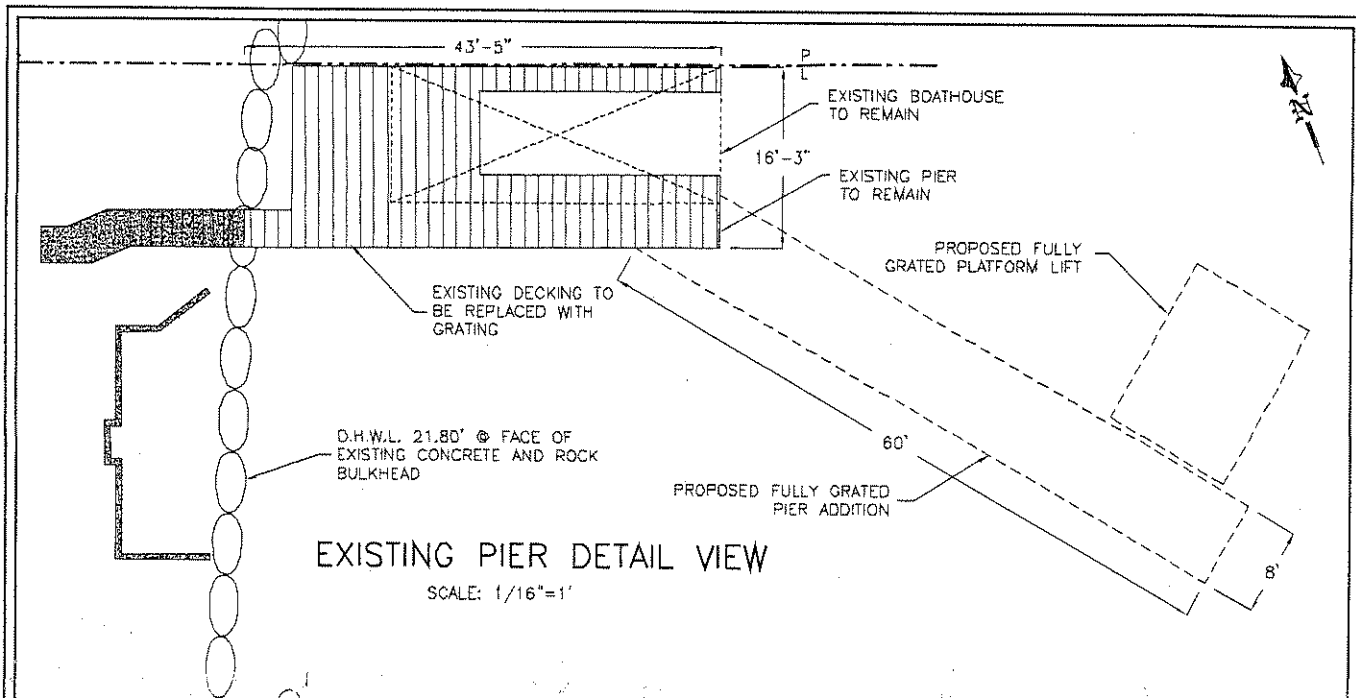
PROPOSED: NEW PIER EXTENSION WITH NEW COVE AREA AND SHORELINE AREA ENHANCEMENT.

NEAR/AT: MEDINA

SHEET: 2 OF: 14

DATE: 08-18-06

DWG#: 06-37049-A2-1



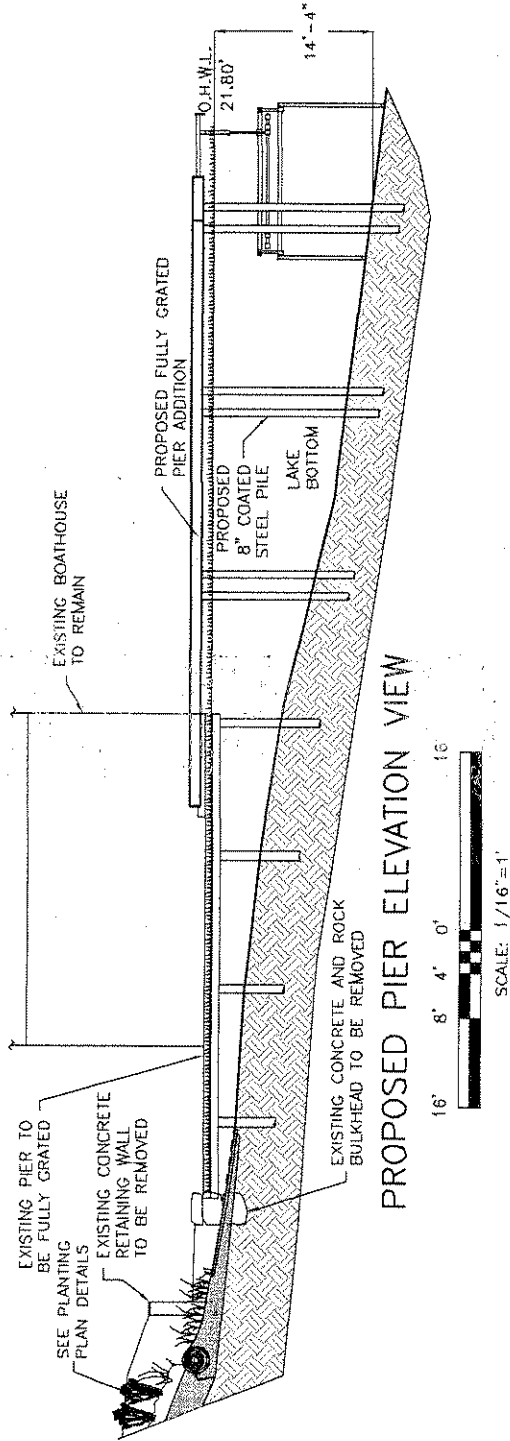
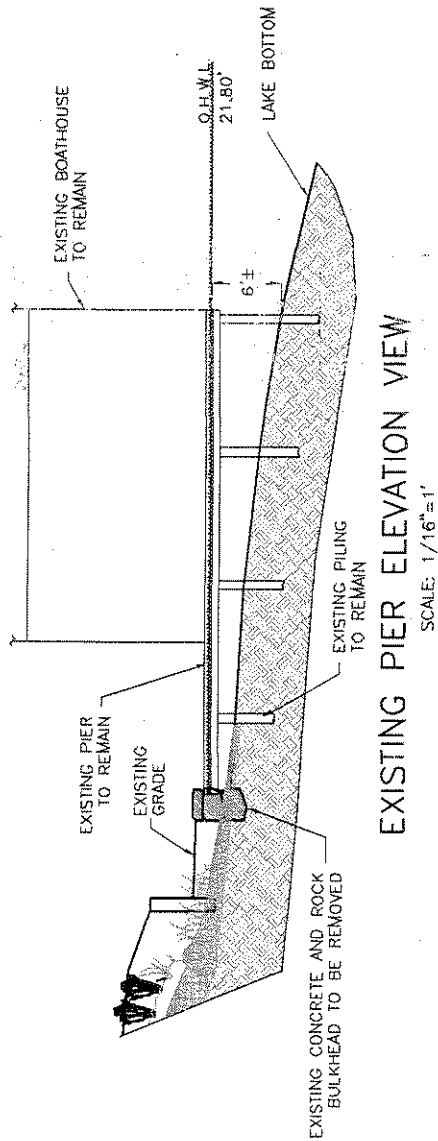
PROPOSED PIER DETAIL VIEW

16' 8' 4' 0' 16'

NOTE: PLANTING PLAN DETAILS START ON SHEET 6.
 PROPOSED PIER FULLY GRATED: 480 S/F
 EXISTING PIER MITIGATION GRATING: 300 S/F

REVISED
04-30-07

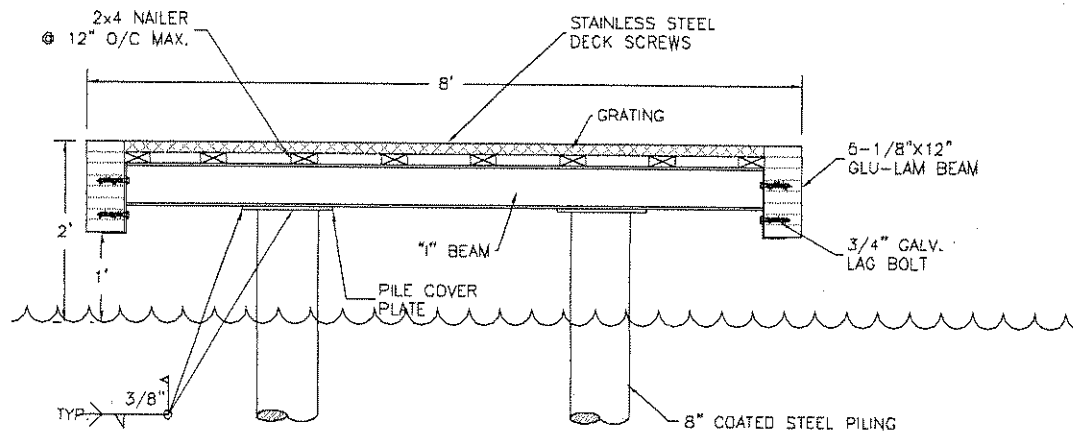
REFERENCE # <i>NWS-0007-504 100</i>	
APPLICANT: JOHN & KIM KIRCHER	
PROPOSED: NEW PIER EXTENSION WITH NEW COVE AREA AND SHORELINE AREA ENHANCEMENT.	
NEAR/AT: MEDINA	
SHEET: 3	OF: 14
DATE: 08-18-06	DWG#: 06-37049-A.3-1



REVISED
04-30-07

REFERENCE #:	NWS-2007-504-00
APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND SHORELINE AREA ENHANCEMENT
NEAR/AT:	MEDINA
SHEET:	4 OF 14
DATE:	08-18-06
DWG#:	06-37049-A 4-1

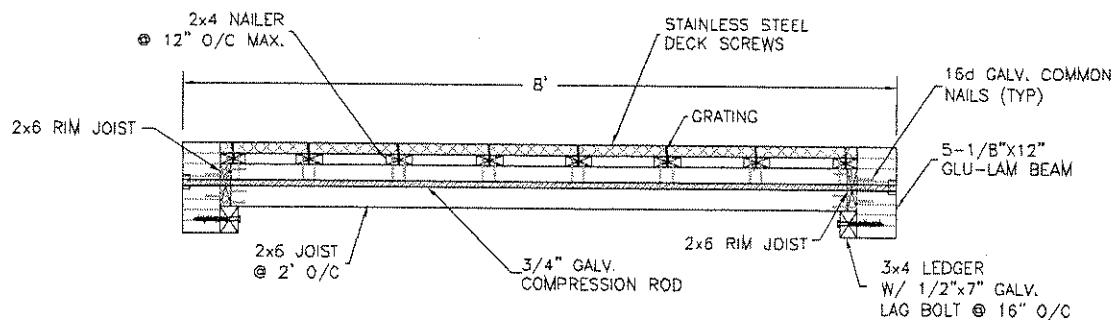
NOTE: PLANTING PLAN DETAILS START ON SHEET 6.



PROPOSED 8' SECTION A-5



SCALE: 1/2"=1'



PROPOSED 8' SECTION FRAMING

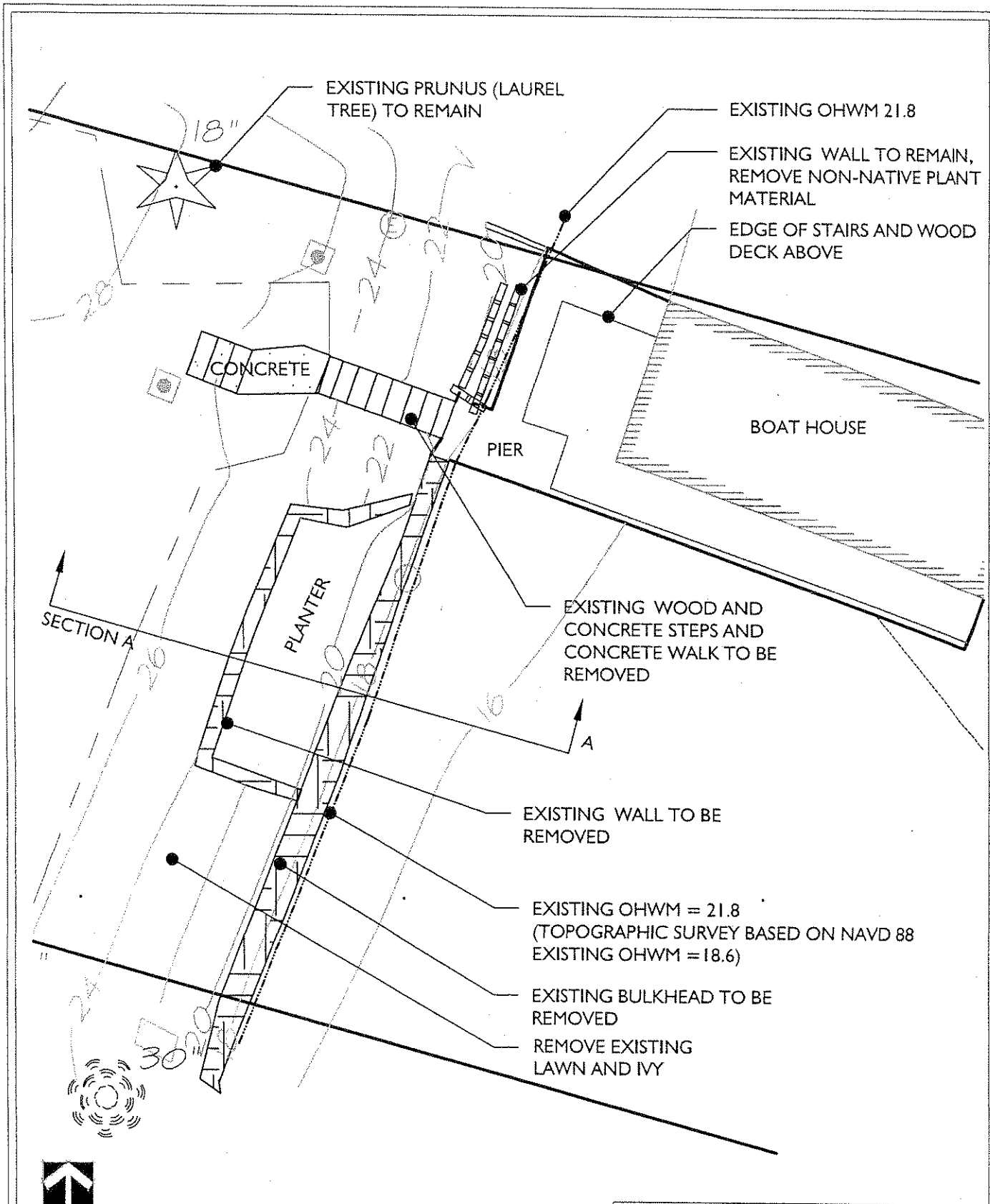
SCALE: 1/2"=1'

MATERIAL LIST

PART	SPECS	TREATMENT
PILING	8" STD WALL	EPOXY COATED
CAPS	W6x15 "H" BEAM	GALVANIZED
GLU-LAMS	5 1/8"x12" DF	ACZA
JOIST	2"x6" DF #2 OR BTR	ACZA
RIM JOIST	2"x6" DF #2 OR BTR	ACZA
NAILERS	2"x4" DF #2 OR BTR	ACZA
GRATING	MOLDED PLASTIC	NONE
HARDWARE	STEEL	STAINLESS OR GALV.

REVISED
04-30-07

REFERENCE #: **NWS-2007-504-N0**
 APPLICANT: JOHN & KIM KIRCHER
 PROPOSED:
 NEAR/AT: MEDINA
 SHEET: 5 OF: 14
 DATE: 08-18-06 DWG#: 06-37049-A5-1



EXISTING CONDITIONS

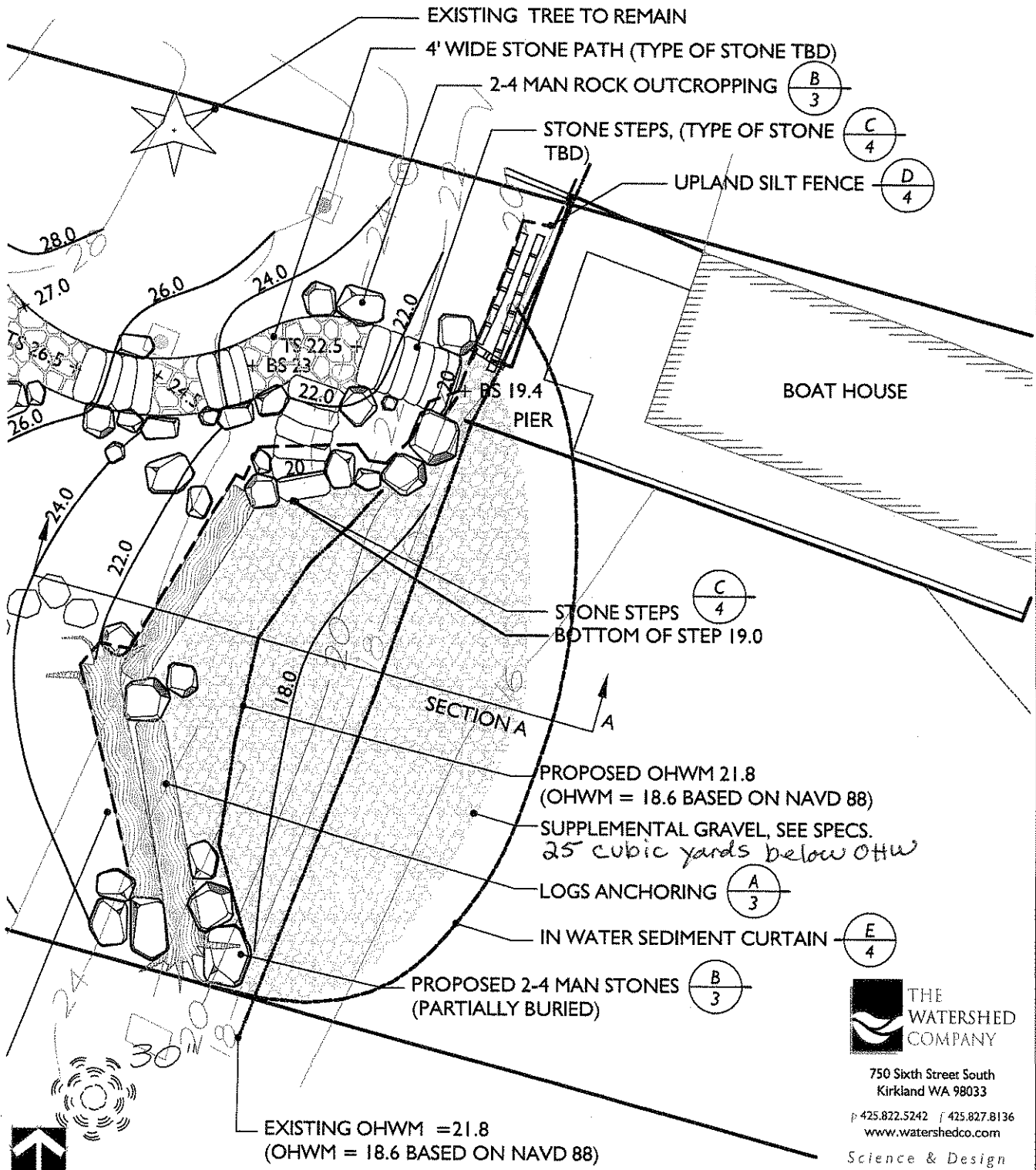
SCALE: 1" = 10'-0"



REFERENCE #: <i>NWS-2007-504-100</i>	
APPLICANT: JOHN & KIM KIRCHER	
PROPOSED: NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD	
NEAR/AT: MEDINA	
SHEET: <i>6</i>	OF: <i>14</i>
DATE: 02-20-07	DWG#: 061019-KIRCHERSITEPLAN

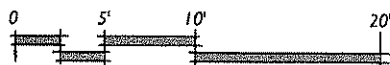
Rev 4-30-07

SEE ENGINEER'S DRAWINGS FOR PIER
IMPROVEMENT INFORMATION



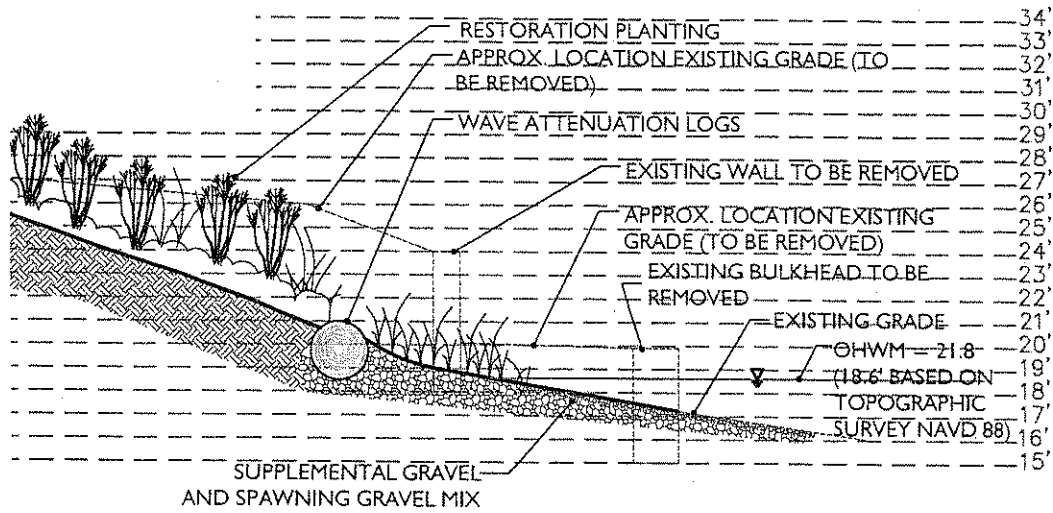
PROPOSED SHORELINE PLAN

SCALE: 1" = 10'-0"



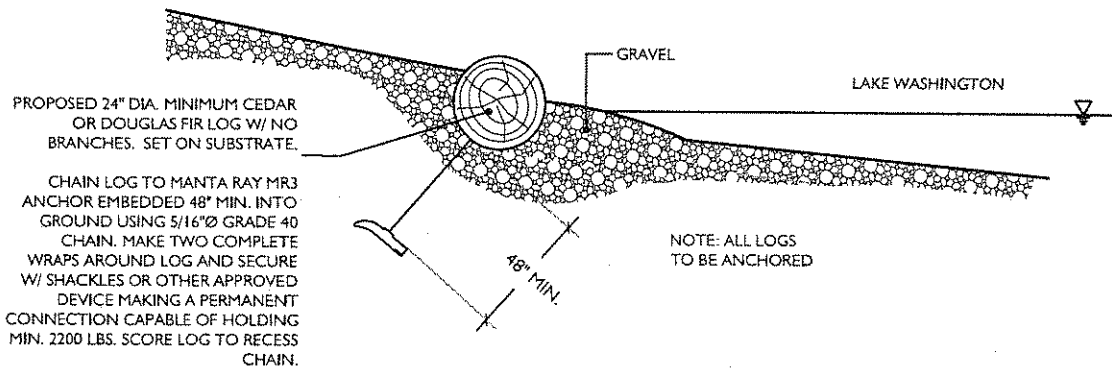
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APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND SHORELINE AREA ENHANCEMENTS
NEAR/AT:	MEDINA
SHEET:	7 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

Rev 4-30-07



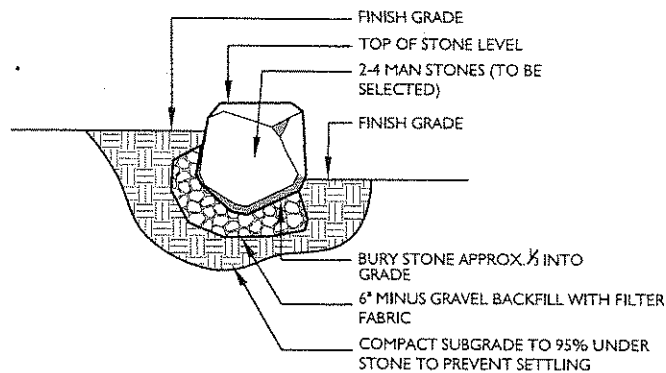
SECTION A-A

SCALE: 1/8" = 1'-0"



A TYPICAL LOG ANCHORING

NTS

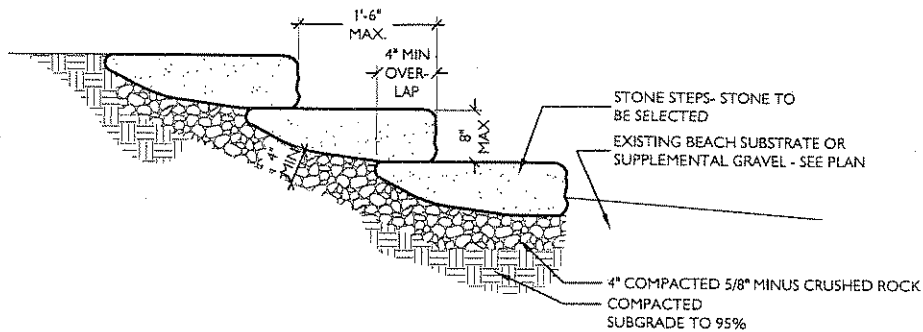


B STONE SETTING

NTS

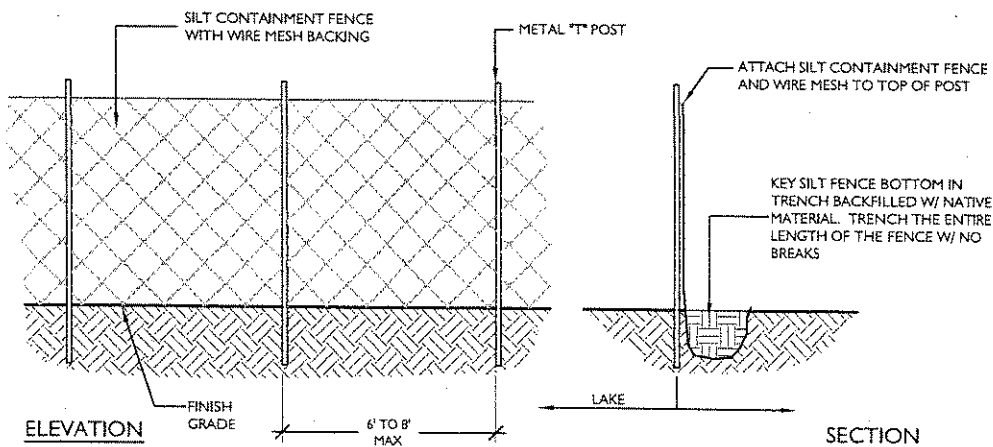
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APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD
NEAR/AT:	MEDINA
SHEET:	8 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

Rev 4-30-07



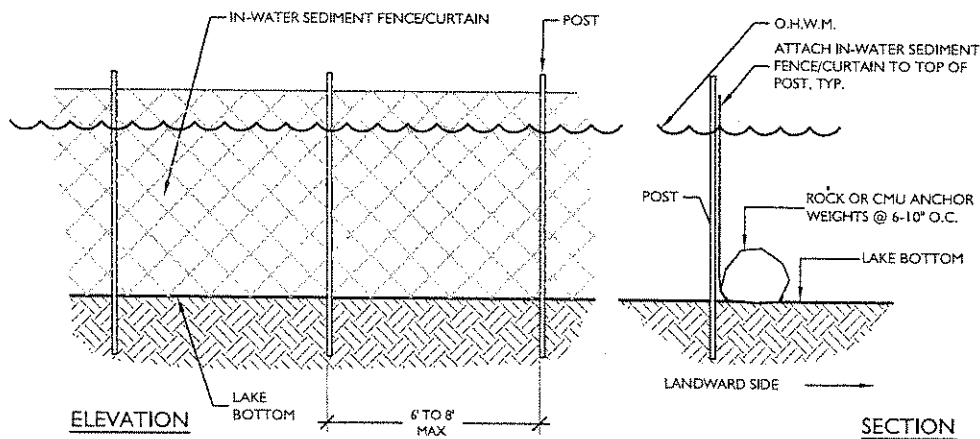
C STONE STEPS INSTALLATION

NTS



D SILT FENCE

NTS



NOTE: A FLOATING SEDIMENT CURTAIN MAY BE UTILIZED W/ THE BOTTOM ANCHORED IN A SIMILAR FASHION

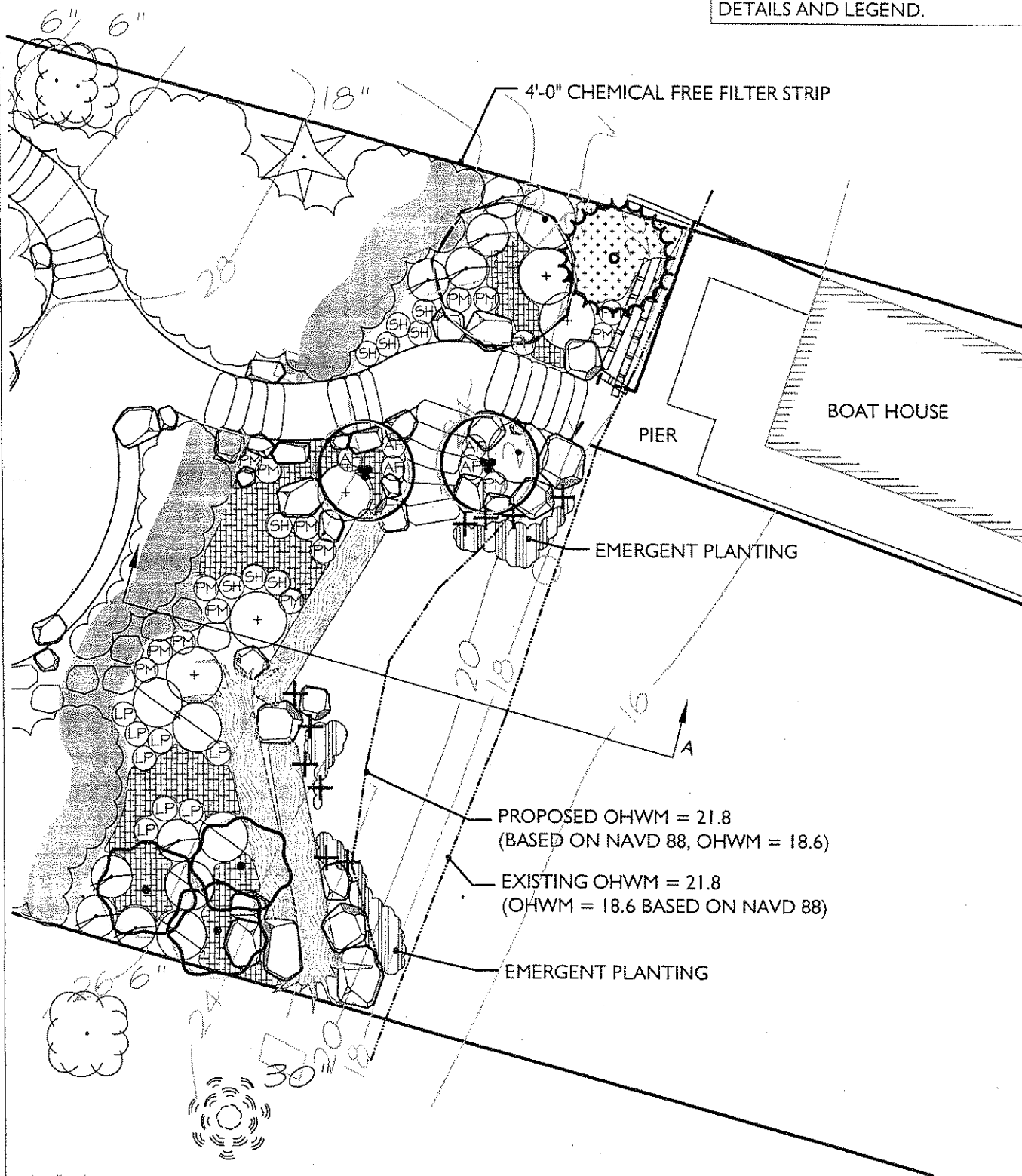
E IN-WATER SEDIMENT CURTAIN INSTALLATION

NTS

REFERENCE #:	NIWS-2007-504-WO
APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD
NEAR/AT:	MEDINA
SHEET:	9 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

Rev 4-30-07

SEE NEXT SHEETS FOR PLANTING
DETAILS AND LEGEND.



SHORELINE REVEGETATION PLAN

SCALE: 1" = 10'-0"






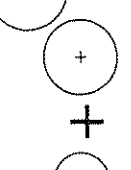
REFERENCE #:	NWS-2007-504-100
APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD
NEAR/AT:	MEDINA
SHEET:	10 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

Rev 4-30-07

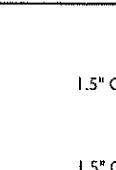
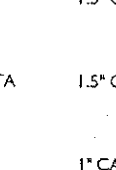
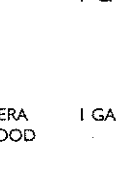
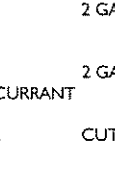
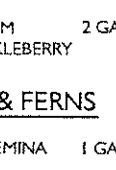
PLANT SCHEDULE

SYMBOL	NAME	SIZE	QTY.	REMARKS
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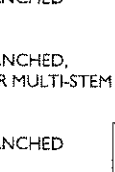
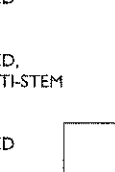

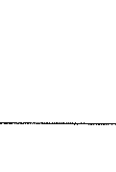
TREES

	ACER CIRCINATUM VINE MAPLE	1.5" CAL	2	MULTI-STEM, WELL BRANCHED
	BETULA PAPYRIFERA PAPER BIRCH	1.5" CAL	1	WELL BRANCHED, SINGLE OR MULTI-STEM
	PRUNUS EMARGINATA BITTER CHERRY	1.5" CAL	3	WELL BRANCHED
	PINUS CONTORTA SHORE PINE	1" CAL	1	FULL AND BUSHY



SHRUBS

	CORNUS STOLONIFERA RED TWIG DOGWOOD	1 GAL.	5	ALL SHRUBS FULL AND WELL-BRANCHED
	MYRICA GALE SWEET GALE	2 GAL.	2	
	RIBES SANGUINEUM RED FLOWERING CURRANT	2 GAL.	5	
	SALIX HOOKERIANA HOOKER WILLOW	CUTTINGS	10	CUTTING, MIN. 3'-0" LENGTH, 1/2" DIA.
	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY	2 GAL.	8	





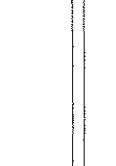
PERENNIALS & FERNS

	ATHERYUM FILIX-FEMINA LADY FERN	1 GAL.	5	ALL PERENNIALS FULL AND VIGOROUS
	LUPINUS POLYPHYLLUS LARGE LEAVED LUPINE	1 GAL.	8	
	POLYSTICHUM MUNITUM SWORD FERN	1 GAL.	16	
	SIDALCEA HENDERSONII HENDERSON'S MALLOW	1 GAL.	9	

GROUNDCOVER

	ARCTOSTAPHYLOS UVA-URSI KINKINNICK	4" POTS	16	18" O.C.
	FRAGARIA CHILOENSIS SAND STRAWBERRY	4" POTS	57	18" O.C.

EMERGENTS

	CAREX OBNUPTA SLOUGH SEDGE	10 CU. IN. POTS	10	18" O.C.
	JUNCUS ENSIFOLIUS DAGGER LEAF RUSH	10 CU. IN. POTS	13	12" O.C.
	IRIS TENAX WESTERN IRIS	10 CU. IN. POTS	8	24" O.C.
	SCIRPUS MICROCARPUS SMALL FRUITED BULRUSH	10 CU. IN. POTS	13	12" O.C.
	SCIRPUS ACUTUS HARDSTEM BULRUSH	10 CU. IN. POTS	13	12" O.C.

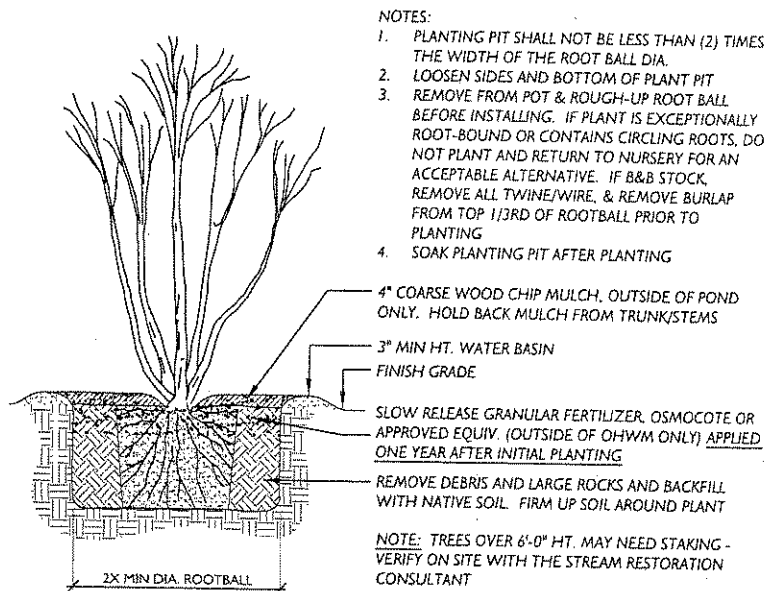
CONSTRUCTION SEQUENCE

1. NATIVE PLANT INSTALLATION SHALL OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST DURING FROST-FREE PERIODS ONLY.
2. BEFORE FINAL GRADING IS COMPLETED BY THE GRADING CONTRACTOR, THE LANDSCAPE CONTRACTOR SHOULD INSPECT THE SITE TO INSURE THAT SOILS, SURFACE AND GRADES ARE SUITABLE FOR PLANTING. AT THAT TIME, ASSESS SOIL CONDITIONS AND IF NECESSARY PROVIDE AMENDMENT IN PLANTING AREAS SUCH THAT THERE IS A MINIMUM OF 20% ORGANIC MATERIAL.
3. NOTE: THE GRADING CONTRACTOR IS RESPONSIBLE FOR ANY ADVERSE DRAINAGE CONDITIONS THAT MAY AFFECT PROPER PLANT GROWTH AND ESTABLISHMENT. NOTIFY OWNER OF ANY POOR DRAINAGE CONDITIONS PRIOR TO CONSTRUCTION.
4. REMOVE ANY AND ALL INVASIVE WEEDS AND THEIR ROOTS FROM THE PLANTING AREA. SPECIES TARGETED FOR REMOVAL INCLUDE HIMALAYAN BLACKBERRY, ENGLISH HOLLY, ENGLISH IVY, SCOT'S BROOM, JAPANESE KNOTWEED, ENGLISH LAUREL, AND MORNING GLORY.
5. LOCATE ALL EXISTING UTILITIES WITHIN THE LIMIT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY UTILITY DAMAGE AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
6. LOOSEN ANY COMPACTED SOILS IN THE PLANTING AREA.
5. AMEND SOIL AS NEEDED PER #2.
6. INSURE THAT ALL FINISH GRADES ARE 1/2" BELOW TOP OF ADJACENT PAVED SURFACE.
7. LAYOUT PLANT MATERIAL PER PLAN FOR INSPECTION BY THE LANDSCAPE ARCHITECT. PLANT SUBSTITUTIONS WILL NOT BE ALLOWED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.
8. INSTALL PLANTS PER PLANTING DETAILS.
9. WATER EACH PLANT THOROUGHLY TO REMOVE AIR POCKETS.
10. INSTALL A 4" DEPTH, COARSE WOOD-CHIP MULCH RING AROUND EACH PLANT, OUTSIDE OF LAKE WASHINGTON OHWM MARK ONLY.
11. INSTALL A TEMPORARY IRRIGATION SYSTEM CAPABLE OF DELIVERING 2" OF WATER PER WEEK TO THE ENTIRE PLANTED AREA. MAINTAIN IRRIGATION SYSTEM IN WORKING CONDITION FOR TWO (2) SUMMERS AFTER INITIAL PLANT INSTALLATION.
12. ONE YEAR AFTER INITIAL PLANT INSTALLATION, APPLY ORGANIC, SLOW-RELEASE FERTILIZER SUCH AS OSMOCOTE OR PERFECT BLEND 4-4-4 TO EACH PLANT OUTSIDE OF LAKE WASHINGTON OHWM MARK ONLY.

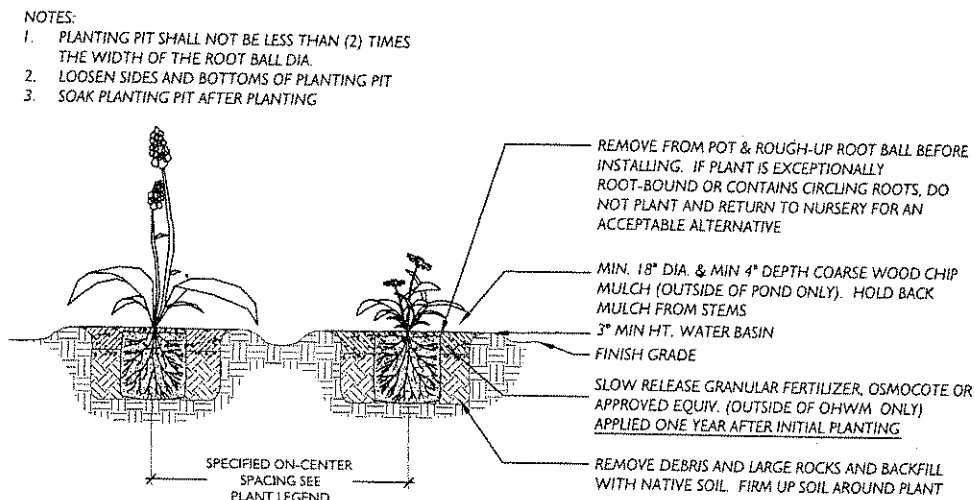
THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL UNTIL FINAL INSPECTION AND APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE. ALL PLANTINGS AND WORKMANSHIP SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING FINAL OWNER ACCEPTANCE

REFERENCE #:	NWS-2007-504-ND
APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD
NEAR/AT:	MEDINA
SHEET:	11 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

Rev 4-30-07



A TREE AND SHRUB PLANTING DETAIL
NTS



B PERENNIAL/GROUNDCOVER PLANTING DETAIL
NTS

SHORELINE REVEGETATION DETAILS

NOT TO SCALE

REFERENCE #:	NWS-2007-504-ND
APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD
NEAR/AT:	MEDINA
SHEET:	12 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

Rev 4-30-07

PLANT INSTALLATION SPECIFICATIONS

NOTE: THESE SPECIFICATIONS ARE A LEGALLY BINDING CONTRACT.

GENERAL NOTES

QUALITY ASSURANCE

1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUNSCALD WILL BE REJECTED.
4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 1973 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE, SEATTLE AUDUBON SOCIETY, 1997.

DEFINITIONS

1. PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS, AND LINERS.
2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE STREAM RESTORATION CONSULTANT.
3. IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
4. SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION

1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
2. PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
3. THE STREAM RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE STREAM RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENTS OF PLANTS

1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.)

SUBMITTALS

PROPOSED PLANT SOURCES

1. WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES

1. PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS

1. TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
2. SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
3. HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
4. LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

REPLACEMENT

1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONSULTANT'S DISCRETION.
2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED.

PLANT MATERIAL

GENERAL

1. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES

SEE PLANT LIST ON ACCOMPANYING PLANS.

ROOT TREATMENT

1. CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
3. ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.

PLANT INSTALLATION SPECIFICATIONS

REFERENCE #: NWS-2007-504-100	
APPLICANT: JOHN & KIM KIRCHER	
PROPOSED: NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD	
NEAR/AT: MEDINA	
SHEET: 13	OF: 14
DATE: 02-20-07	DWG#: 061019-KIRCHERSITEPLAN

Rev 4-30-07

SHORELINE CONSTRUCTION NOTES

SHORELINE PLAN SUMMARY

THE PURPOSE OF THIS PROJECT IS TO REPLACE APPROXIMATELY 40 LINEAR FEET OF A VERTICAL MORTARED ROCK BULKHEAD AND CONCRETE RETAINING WALL WITH A BEACH COVE AND PLANTING PLAN WHICH WOULD PROVIDE AN AESTHETICALLY PLEASING SEMI-NATURAL AREA WHILE IMPROVING STABILIZATION AND ECOSYSTEM FUNCTION OVER THE EXISTING CONDITION. THE ENHANCED SHORELINE WOULD INCLUDE A WELL-GRADED GRAVEL MIX, LARGE LOGS AND BOULDERS, AND EMERGENT VEGETATION TO CREATE COMPLEX SHALLOW-WATER REFUGE AND FORAGING HABITAT, WHILE ATTENUATING WAVE ENERGY FROM WINTER STORMS AND LARGE BOATS. PROPOSED NATIVE TERRESTRIAL VEGETATION WOULD INCREASE ALLOCHTHONOUS INPUT OF INSECTS AND DETRITUS.

APPROVAL

IMPLEMENTATION OF THESE PLANS REQUIRES REVIEW AND APPROVAL BY THE U.S. ARMY CORPS OF ENGINEERS (USACE), THE WASHINGTON DEPARTMENT OF FISH AND WILDLIFE, AND THE CITY OF MEDINA. ALL PLANS SHOULD BE CONSTRUCTED PER THE INSTRUCTIONS FROM THE PERMITTING AGENCIES.

SUPERVISION

THE PROJECT BIOLOGIST (REPRESENTATIVE FROM THE WATERSHED COMPANY (425-822-5242) OR OTHER QUALIFIED ENVIRONMENTAL CONSULTING FIRM FAMILIAR WITH THESE PLANS) SHALL BE ON HAND TO OVERSEE AND DIRECT IMPLEMENTATION OF THESE PLANS. ALL SHORELINE SUBSTRATE, BOULDERS, AND PLANT MATERIALS MUST BE INSPECTED AND APPROVED BY THE PROJECT BIOLOGIST PRIOR TO INSTALLATION.

IMPLEMENTATION SEQUENCE

1. ESTABLISH THE BOUNDARIES OF THE RESTORATION AREA IN FIELD.
2. A SEDIMENTATION CONTROL CURTAIN (SILT FENCE) WOULD BE DEPLOYED AND MAINTAINED IN A FUNCTIONAL MANNER TO CONTAIN SUSPENDED SEDIMENT BY FIRST PUSHING 10-FOOT-LONG WOOD STAKES INTO THE SUBSTRATE, AT MAXIMUM INTERVALS OF 6 TO 8 FEET ALONG THE SHORELINE. THE SILT FENCE WOULD BE HUNG BETWEEN THE STAKES, WITH THE BOTTOM ANCHORED BY ROCK PLACED EVERY 6 TO 10 FEET. IF AVAILABLE, THE CONTRACTOR MAY USE A FLOATING SEDIMENT CURTAIN, ANCHORED SIMILARLY TO THE SUBSTRATE, IN PLACE OF STAKING. TO PREVENT UPLAND SOIL EROSION, SEDIMENT CONTROL FENCING WOULD ALSO BE INSTALLED, OR OTHER PREVENTATIVE MEASURES WOULD BE IMPLEMENTED AROUND UPLAND AREAS WHERE CLEARING OR GRADING IS PLANNED.
3. EXCAVATE THE SHORELINE PER THE DESIGN SPECIFICATIONS. REMOVED PORTIONS INCLUDE THE VERTICAL MORTARED ROCK BULKHEAD, UPLAND CONCRETE RETAINING WALL, AND UPLAND SOILS. THE BULKHEAD WOULD BE REMOVED USING A BARGE-MOUNTED CRANE AND HAND TOOLS. APPROXIMATELY 35 CUBIC YARDS OF MATERIAL WOULD BE EXCAVATED FROM ABOVE (LANDWARD OF) THE OHWM.
4. THE EXCAVATED PORTION OF THE SHORELINE IS TO BE LINED WITH FILTER FABRIC (MEDIUM WEIGHT WOVEN GEOTEXTILE [E.G. MIRAFI FW-402, US FABRIC US-1540, AMOCO 1198, BELTECH 768]) INSTALLED AS SHOWN.
5. A MINIMUM SIX-INCH LAYER OF QUARRY SPALLS (~5 CUBIC YARDS) IS TO BE USED AS BACKFILL FOR THE LARGE BOULDERS AND LOGS WHICH WILL FORM THE NEW SHORELINE. LARGE BOULDERS ARE TO BE PLACED ALONG THE SHORELINE ACCORDING TO THE SITE PLAN AND UNDER THE SUPERVISION OF THE PROJECT LANDSCAPE ARCHITECT TO AID IN SHORE STABILITY AND TO REDUCE EROSION CAUSED BY WAVE ACTION. ROCKS ARE TO BE OF MIXED SIZES, TYPICALLY 2-4 M. PUSH ALL ROCKS INTO PLACE UNTIL STABLE AND POSITION IN A TIERED FASHION IF MORE THAN ONE ROCK IS NECESSARY FOR VERTICAL STABILITY, SLOPING LANDWARD ACCORDING TO DESIGN PLACEMENT. A ROCK STAIRCASE LEADING FROM THE PIER ACCESS PATHWAY TO THE LOWER SHORELINE WOULD BE BUILT INTO THE BOULDER BULKHEAD PORTION ADJACENT TO THE PIER. APPROXIMATELY 14 CUBIC YARDS OF BOULDERS WILL BE PLACED ALONG THE SHORELINE PERIMETER.
6. THREE LOGS, EITHER WESTERN RED CEDAR OR DOUGLAS FIR, (MINIMUM 24-INCH DIAMETER, 15 FEET IN LENGTH) WOULD BE SITUATED ALONG THE LANDWARD SIDE OF THE NEW COVE AS SHOWN ON THE PLANS TO HELP STABILIZE THE SHORELINE, ATTENUATE WAVE ENERGY AND ENHANCE NEARSHORE HABITAT. ANCHOR THE LOGS PER THE DESIGN SPECIFICATIONS USING MANTA RAY ANCHORS OR EQUIVALENT.
7. ADD SHORELINE GRAVEL (GRAVEL/COBBLE MIX) ACROSS THE SHORELINE AS SPECIFIED BELOW AND AS DIRECTED BY THE PROJECT BIOLOGIST. THE COARSE SHORELINE GRAVEL IS TO BE WASHED, ROUNDED ROCK OF MIXED SIZES. APPROXIMATELY 15 CUBIC YARDS OF COARSE GRAVEL WILL BE USED AS A BASE LAYER.

SPECIFICATIONS FOR SHORELINE GRAVEL MIX (BY VOLUME):

0.5" - 2"	50%
2" - 4"	30%
4" - 6"	20%

8. SMALLER DIAMETER WASHED, ROUNDED SPAWNING GRAVEL (LESS THAN TWO INCHES IN DIAMETER) WILL BE ADDED AS A TOP LAYER BELOW THE OHWM. APPROXIMATELY 20 CUBIC YARDS OF SPAWNING GRAVEL WILL BE PLACED ALONG THE SHORELINE.

SPECIFICATIONS FOR SPAWNING GRAVEL MIX (BY VOLUME):

1/2" - 3/4"	40%
3/4" - 1 1/2"	30%
1 1/2" - 2"	30%

9. SOW ALL DISTURBED AREAS ABOVE THE SHORELINE RECONSTRUCTION AREA WITH AN EROSION-CONTROLLING STERILE OR NON-COMPETITIVE, ANNUAL GRASS SEED MIXTURE AND/OR MULCH LIBERALLY WITH STRAW. IF SITE IS FULLY IRRIGATED, PLANTS MAY BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION.
10. PLANT THE AREAS INDICATED ON THE REVEGETATION PLAN WITH THE NATIVE TREE, SHRUB, AND GROUND COVER SPECIES DURING THE FIRST DORMANT SEASON (NOVEMBER THROUGH MARCH). USE SIZING AND CONDITION INFORMATION PROVIDED IN THE PLANTING LEGEND. IF PLANTS ARE INSTALLED OUTSIDE OF THE DORMANT SEASON, THEN A MINIMUM OF 1 INCH OF WATER PER WEEK SHOULD BE PROVIDED DURING THE FIRST SUMMER.
11. SURVIVAL IN A HEALTHY CONDITION IS TO BE GUARANTEED BY THE LANDSCAPE CONTRACTOR FOR ALL OF THE PLANTED SPECIMENS THROUGH THEIR ENTIRE FIRST GROWING SEASON. AN ACCEPTANCE INSPECTION BY THE PROJECT BIOLOGIST OR PROJECT LANDSCAPE ARCHITECT IS TO BE MADE DURING THE PERIOD OF SEPTEMBER 15 THROUGH OCTOBER 15 FOLLOWING THE INITIAL DORMANT SEASON PLANTING (6-10 MONTHS LATER) AND ANY DEAD, MISSING, OR UNHEALTHY SPECIMENS ARE TO BE REPLACED. REPLACEMENT IS TO OCCUR DURING THE THEN-UPCOMING DORMANT SEASON.

MAINTENANCE AND MONITORING:

THE APPLICANT SHALL ASSURE 100 PERCENT SURVIVAL OF TREES AND SHRUBS DURING THE FIRST TWO YEARS OF MONITORING, 100 PERCENT SURVIVAL OF TREES DURING THE FINAL THREE YEARS OF MONITORING, AND 80 PERCENT SURVIVAL OF SHRUBS DURING THE FINAL THREE YEARS OF MONITORING. THE APPLICANT SHALL MAKE "GOOD-FAITH" EFFORTS TO ESTABLISH THE PROPOSED EMERGENT VEGETATION. THE INSTALLED VEGETATION COMMUNITY WILL BE MONITORED FOR FIVE YEARS AFTER INITIAL INSTALLATION. PRIOR TO THE FIRST MONITORING VISIT, AN AS-BUILT PLAN WILL BE PREPARED THAT DOCUMENTS THE IMPLEMENTATION OF THE MITIGATION PLAN. ANY MINOR CHANGES TO THE APPROVED MITIGATION PLAN THAT ARE REQUIRED BY FIELD CONDITIONS PRESENT DURING PLAN IMPLEMENTATION MUST BE DOCUMENTED ON THE AS-BUILT PLAN AND SUBMITTED TO THE CITY OF MEDINA AND USACE FOR APPROVAL. THE MONITORING PERIOD BEGINS ONCE THE AS-BUILT PLAN HAS BEEN APPROVED. THE APPROVED AS-BUILT PLAN THEN BECOMES THE APPROVED RESTORATION PLAN FOR FUTURE INSPECTION PURPOSES. MONITORING VISITS IN YEARS 1 THROUGH 5 SHALL OCCUR BETWEEN JULY 1 AND SEPTEMBER 15. DURING EACH MONITORING VISIT, COLOR PHOTOGRAPHS WILL BE TAKEN FROM POINTS TO BE IDENTIFIED ON THE AS-BUILT PLAN THAT PROVIDE COMPLETE COVERAGE OF THE RESTORATION AREA. PHOTOGRAPHS OF THE EMERGENT VEGETATION AREA SHOULD ALSO BE TAKEN BEFORE PLANTING AND IMMEDIATELY AFTER PLANTING. THEREAFTER, PHOTOS OF EMERGENT VEGETATION SHOULD BE TAKEN TWICE YEARLY, ONCE AT HIGH LAKE (JUNE OR JULY) AND ONCE AT LOW LAKE (DECEMBER OR JANUARY). IN ADDITION, THE PLANTING AREA WILL BE EXAMINED AND THE FOLLOWING ITEMS NOTED:

- 1) THE PERCENT SURVIVAL OF EACH PLANTED SPECIES;
- 2) AN ESTIMATE OF PERCENT COVER (NATIVE WOODY SPECIES, NATIVE HERBACEOUS SPECIES, AND NON-NATIVE/INVASIVE SPECIES);
- 3) THE SPECIES COMPOSITION, NOTING WHETHER A SPECIES IS NATIVE OR EXOTIC AND WHETHER PLANTS PRESENT WERE PLANTED OR ARE VOLUNTEERS; AND
- 4) THE GENERAL HEALTH OF VEGETATION, NOTING WHETHER PESTS OR DISEASE ARE PRESENT.

PARTICULAR ATTENTION SHALL BE PAID TO THE ENCROACHMENT OR EMERGENCE OF HIMALAYAN BLACKBERRY, EVERGREEN BLACKBERRY, BUTTERFLY BUSH, PURPLE AND YELLOW LOOSESTRIFE, AND JAPANESE KNOTWEED. THE EMERGENCE OF THESE OR ANY SPECIES LISTED BY THE WASHINGTON STATE NOXIOUS WEED BOARD AS CLASS A, CLASS B, OR CLASS C WEEDS WITHIN PLANTING AREAS WILL BE NOTED AND RECOMMENDATIONS FOR IMMEDIATE MANUAL REMOVAL WILL BE MADE. FOLLOWING EACH YEAR'S MONITORING VISIT, A SHORT LETTER-STYLE REPORT SHALL BE PREPARED DETAILING THE FINDINGS OF THE VISIT. THIS REPORT SHALL INCLUDE INFORMATION ON THE SURVIVAL, PERCENT COVER, AND CONDITION OF THE INSTALLED PLANTS; PHOTOGRAPHS OF THE SITE; A DISCUSSION OF INVASIVE WEED COVER IN THE PLANTING AREAS; AND ANY RECOMMENDATIONS FOR MAINTENANCE. THIS REPORT SHALL BE SUBMITTED TO THE CITY OF MEDINA AND THE USACE AND TO THE APPLICANT WITHIN A MONTH'S TIME OF EACH YEAR'S MONITORING VISIT.

MAINTENANCE OF THE TERRESTRIAL PLANTS DURING THE FIVE-YEAR MONITORING PERIOD SHALL BE CONDUCTED BY THE APPLICANT OR HIS AUTHORIZED AGENTS TO ENSURE ACHIEVEMENT OF THE SURVIVAL STANDARDS. MAINTENANCE SHALL INCLUDE REMOVAL AND REPLACEMENT OF DEAD OR DYING PLANTS, WEEDING OF NON-NATIVE INVASIVE SPECIES, AND WATERING. WEEDING OF NON-NATIVE SPECIES IN THE NEARSHORE AREA SHALL BE DONE WHEN JUVENILE SALMONIDS ARE NOT IN THE SHALLOW WATERS OF THE PROJECT SITE. MAINTENANCE SHALL NOT INCLUDE APPLICATION OF TOXIC CHEMICAL TREATMENTS OR PRUNING. THE APPLICANT SHALL ADDRESS ALL MAINTENANCE AND REPAIR RECOMMENDATIONS WITHIN FOUR MONTHS OF RECEIVING EACH MONITORING REPORT, AND SHALL FORWARD A MEMO TO THE CITY OF MEDINA AND THE USACE DETAILING ANY ACTIONS THAT WERE TAKEN.

REFERENCE #:	NWS-2007-504-ND
APPLICANT:	JOHN & KIM KIRCHER
PROPOSED:	NEW PIER EXTENSION WITH NEW COVE AREA AND REPLACEMENT BULKHEAD
NEAR/AT:	MEDINA
SHEET:	14 OF 14
DATE:	02-20-07
DWG#:	061019-KIRCHERSITEPLAN

SHORELINE CONSTRUCTION NOTES

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